

Curriculum Vitae

Dr Rajib Rajhans
Associate Professor
RR college of veterinary
sciences
Deoli, N.H.12, Jaipur Road, Deoli,
(Raj) – 304804
Phone – 7974627605
Email – rajibhans@gmail.com

Name of Employer	Post Held	From	To
RR college of Veterinary Science Deoli, NH -12, Jaipur Road, Deoli (Raj) - 304804	Associate Professor	08/2025	Present
RPS college, mahendragarh, LUVAS, Haryana – 123029, India	Associate Professor	09/2024	02/2025
Arawali Veterinary College, Sikar, Rajasthan – 332001.	Professor (Veterinary Physiology & Biochemistry)	08/2022	08/2023
Mahatma Gandhi Veterinary College, Bharatpur, Rajasthan - 321001	Professor & Head of Department Veterinary Physiology & Biochemistry	04/2021	07/2022
Dr Dhara Dhaulakudi PGIMS, Rohtak, Haryana – 124001	Postdoctoral Fellow	08/2015	08/2016
Prof P. Reddanna NIAB Hyderabad- 500032.	Research Associate	08/2013	08/2014
Dr Weal El Shamy UMMC, MS, Jackson-39216	Postdoctoral Fellow II	07/2011	03/2012
Dr. Atfi, Cancer Institute, UMMC, Jackson, MS, USA – 39216	Postdoctoral Fellow – II	03/2012	04/2012

Dr Kathleen Mulder Penn State Univ, HMC, Pennsylvania – 17033. USA	PostdoctoralFellow	06/2009	09/2010
Dr Christopher Herzog, Dept. of Pharmacology, Hershey medical centre, PennState University, Pennsylvania–17033.USA.	Postdoctoral Fellow	09/2010	06/2011
Dr Rong Li, Department of MolecularMedicine, UTHSCSA, San Antonio-78245, USA	Instructor	03/2008	03/2009
Dr Ratna Vadlamudi Department of Ob&Gyn, UTHSCSA, San Antonio- 78229, USA	Postdoctoral Fellow	01/2006	03/2009
Dr Ratna Vadlamudi Stanley S Scott Cancer Centre, Dept of genetics, LSUHSC,NO,LA– 70112, USA	Postdoctoral Fellow	04/2005	12/2005

- 1) **LSU Health Science Centre/Univ. of Texas Health Science Centre at San Antonio –**
Title: Studies on establishing role of PELP1 in Endocrine Therapy Resistance in Breast and Ovarian cancer through molecular biology and **Transgenic/Knockout mice models** Studies on role of PELP1 In regulation of Aromatase production. (**Supported by NIH grant CA095681**)

Molecular Biology Experiments, Design constructs (mammary gland overexpression mice model MMTV Tg) genotyping transgenic mice. (PI: **Dr. Ratna Vadlamudi /Dr. Tekmal Rajeshwar Rao**) (**Supported by NIH grant CA095681**)

Research Instructor Department of Molecular Medicine, UTHSCSA – Designed a Adeno associated virus (AAV) vector for studies on NELF in translational eelongation, studies involved identification of NELF binding partner using co-IP and ChIP assay.

- 2) **Penn State Hershey Medical Centre** – 1) Studies on establishing role of novel AMP regulator in understanding lung adenocarcinoma development and foster new therapeutic strategies for activation of **apoptosis/autophagy** in malignant lung adenocarcinoma - Molecular and genomic approaches used. (PI: Dr. Christopher Herzog)

Studies on establishing role of Km23-1 in dynein light chain and cytoskeletal arrangement. (PI: Dr. Kathleen Mulder).

- 3) **Univ. Of Mississippi Medical Centre, Jackson, MS**: Molecular Biology Experiments, Design Constructs, Bioinformatics and Data analysis. Molecular Biology Experiments, Design Constructs, Bioinformatics and Data analysis, Characterization of LncRNA in TNBC's and ER positive tumor, molecular cloning of LncRNA, cloning of BRCA1-IRIS characterization of role of IRIS in DNA damage checkpoint, detection of driver mutations associated with BRCA1/2 DNA damage checkpoint, CLIP, RNA-IP, lncRNA localization and RNA-Immunoprecipitation, RNAseq, ZFN and TALEN mediated Genome Editing.. (PI: Dr. Elshamy/Dr. A. Atfi).
- 4) **NIAB Hyderabad** – Research Associate – Reddanna Lab, Generation of Exosome synthetic vector vaccine, mRNA zip code Vaccine against tumor associated antigen (TAA), characterization of UPR response protein ERN1, identification of driver mutations and deletion/inversions in TNBC's and Basal Breast Cancer utilizing RNAseq, aCGH array techniques. Generation of Exosome synthetic vector vaccine
- 5) **PGIMS Rohtak, Haryana**. Post Doctoral Research Associate – Dhara Lab Project Completed. Detection of mutations within advanced Gliomas and Brain tumors (PI: Dr. Dhara)

Teaching Experience:

- 1) Molecular Biology and Biochemistry at PGIMS Rohtak, Department of Molecular Medicine. (08/2015-08/2016)
- 2) Physiology and biochemistry at Department of Physiology & Biochemistry, AVC, RAUVAS, Sikar, Rajasthan
- 3) Physiology and Biochemistry at Department of Physiology & Biochemistry, LUVAS, Mahendragarh, Haryana

Academic Position held:

1. Professor & Head, Department of Physiology & Biochemistry, MGVC, RAJUVAS, Bharatpur, Rajasthan.
2. Professor, Department of Physiology & Biochemistry, Aravali veterinary college, RAJUVAS, Sikar, Rajasthan.
3. Associate Professor, Department of Physiology & Biochemistry, RPS college of veterinary sciences, LUVAS, Mahendragarh, Haryana.
4. Associate Professor, Department of Physiology & Biochemistry, RR college of veterinary and animal sciences, RAJUVAS, Deoli, Rajasthan.

I. Educational Qualification

1) PhD (2001-2005)

Major: Animal Physiology, Dec., 2004

Concentration: Reproductive Biotechnology (In Vitro Embryo Production, Embryogenomics and ES cells).

Indian Veterinary Research Institute, Izatnagar, Bareilly- 243122, Uttar Pradesh, India.

Thesis: Studies on expression of Hsp70 and Glut1 during In Vitro Production of buffalo (*Bubalus bubalis*) embryos.

2) MSc (1999-2001)

Major: Animal Physiology, August 2001

National Dairy Research Institute (NDRI), Karnal, Haryana-132001, India.

Thesis: Status of Metabolic Hormones in crossbred bull calves exhibiting different growth rates. **(Endocrine regulation of growth).**

3. BVSc & AH (1993-1998), ANGRAU, Hyderabad.

II. Clinical Internship & Fellowship:

Senior Research Fellow - Institutional (September 2001 – 2004), Indian Veterinary Research Institute, Izatnagar, Bareilly.

Junior Research Fellow- Institutional (Sep 1999-2001): National Dairy Research Institute, Karnal, Haryana, INDIA

Veterinary Clinical Internship (September 1997 - Aug 1998) Acharya N.G. Ranga Agricultural University (ANGRAU), Andhra Pradesh, INDIA.

III. Publications:

1) RAJHANS, R., & Kumar, A. Protasomes as interlocutor for zygotic epigenome health: role of protasome secretome in maintenance of zygotic epigenome.: Protasomes in zygotic epigenome health. *Indian Journal of Dairy Science*, 76 (6), 2023.

2) Nair HB, Perla RP, Kirma NB, Krishnegowda NK, Ganapathy M, **Rajhans R**, Nair SS, Saikumar P, Vadlamudi RK, Tekmal RR. Estrogen Receptor- beta Mediates the Protective Effects of Aromatase Induction in the MMTV- Her-2/neu x Aromatase Double Transgenic Mice. *Horm Cancer*. 2011 Oct 18. (**Impact Factor-1.217**)

3) Gonugunta VK, Nair BC, **Rajhans R**, Sareddy GR, Nair SS, Vadlamudi RK. Regulation of rDNA Transcription by Proto-Oncogene PELP1.. *PLoS One* 2011;6(6):e21095. Epub 2011 Jun 13. (**Impact Factor – 4.411**)

4) **Rajhans R**, Kumar GS, Dubey PK, Sharma GT. Effect of timing of development on total cell number and expression profile of HSP-70.1 and GLUT-1 in buffalo (*Bubalus bubalis*)

oocytes and preimplantation embryos produced in vitro. *Cell Biol Int.* 2010 Mar 29;34(5):463-8.(**Impact Factor: 1.727**)

- 5) Vadlamudi RK, **Rajhans R**, Chakravarty D, Chandrasekharan Nair B, Nair SS, Evans DB, Chen S, Tekmal RR. Regulation of aromatase induction by nuclear receptor coregulator PELP1. *Journal of Steroid Biochemistry and Molecular Biology*, 2010 Feb 28;118(4-5):211-8.(**Impact factor:3.109**).
- 6) **Rajhans R**, Nair HB, Nair SS, Cortez V, Ikuko K, Kirma NB, Zhou D, Holden A, Brann DW, Chen S, Tekmal RR, and Vadlamudi RK. Modulation of *in situ* estrogen synthesis by PELP1 leads to hormonal independence in breast cancer cells. *Mol Endocrinol.* 22:649-664, 2008.(**Impact Factor: 5.257**)
- 7) Chakravarty D, Nair SS, **Rajhans R**, Perla RP, Liu J, Seetharaman B, Tekmal RR, , Burow ME, Auersperg N, Broaddus RR and Vadlamudi .Role of PELP1/MNAR signaling in ovarian tumorigenesis. *Cancer Research*, 68:1-8, 2008. (**Impact factor: 8.234**)
- 8) Nagpal JK, Nair SS, Chakravarty D, **Rajhans R**, Pothana S, Brann DW, Tekmal RR, and Vadlamudi RK Growth Factor Regulation of ER- coregulator PELP1 Functions via PKA Pathway. *Molecular Cancer Research*, 6:851-61, 2008. (**Impact Factor: 4.373**)
- 9) **Rajhans R**, Sujit Nair, Alan H Holden, Rajeshwar Rao Tekmal, Rakesh Kumar, and Ratna K. Vadlamudi Oncogenic Potential of the Nuclear Receptor Coregulator PELP1/MNAR. *Cancer Res* 2007 Jun 1;67(11):5505-5512.(**Impact Factor:8.234**)
- 10) **Rajhans R** and Vadlamudi RK. Comprehensive analysis of recent biochemical and biologic findings regarding a newly discovered protein- PELP1/MNAR. *Clin Exp Metastasis*. Review. 2006; 23(1):1-7 (**Impact Factor: 4.113**)

IV. Abstracts/Poster Discussion

- 1) **R. Rajhans**, G. S. Kumar and G. T. Sharma. Expression profiles of stress and metabolic marker genes during in vitro production of buffalo (*Bubalus bubalis*) embryos (2006). *Reprod Fertil Dev* 18(2) 253 – 254. (Abstract)
- 2) K. Loganathasamy, **R. Rajhans**, G. Sai Kumar and G. T. Sharma. Developmental competence of buffalo (*Bubalus bubalis*) oocytes vitrified at different stages of maturation in vitro *Reprod Fertil Dev* (2006). 18 (2) 159 – 159. (Abstract)
- 3) **Rajhans R**, Harish Nair, Nameer B. Kirma, Kijima Ikuko, Chen Shiuan, Rajeshwar Rao Tekmal, Ratna K. Vadlamudi PELP1/MNAR deregulation promotes local estrogen synthesis in breast cancer cells.(2007)*Proc.Am.Assn.Cancer Res*(Control/Tracking Number: 07-AB-4544-AACR)
- 4) Nair S, **Rajhans R**, Nagpal J, Guider J, Kumar R, Vadlamudi RK PELP1/MNAR interacts with BCAS2: Potential role in ER-mediated splicing. (2006) *Proc. Am. Assn. Cancer Res.* 47: 2930.
- 5) **Rajhans R**, Nair S, Tekmal RR, Kumar R, Vadlamudi RK; Cellular Transformation and oncogenesis by PELP1/MNAR, a broad coactivator in mammalian cells.(2006)*Proc.Am.Assn.Cancer Res.* 47: 4215.
- 6) Kirma N, Nair HS, Perla R, **Rajhans R**, Vadlamudi RK, Tekmal RR Her2/neu- induced mammary tumorigenesis is reduced in aromatase x Her2/neu double transgenic mice. (2006) *Proc. Am. Assn. Cancer Res.* 47: 22947.

- 7) Chandrasekharan Nair, B, Nair SS, Charakravarty D, Rajhans R, Cortez V, Tekmal R, Vadlamudi RK.. PELP1/MNAR: A novel CDKs substrate and regulator of pRb/E2F pathway. (2008) *Proc. Am. Assn. Cancer Res.* April 12-16; San Diego, CA.
- 8) Chakravarty D, Nair CB, Rajhans R, Valerie C, Nair SS, deGraffenried LA, Sun L, Vadlamudi RK. Significance of PELP1/MNAR mediated ER- nongenotropic actions in cytoskeletal signaling; 30th SABCS, Dec 13-16 2007, San Antonio, Texas.

V. Oral Presentations

- 1) **Rajhans R**, Nair H, Kirma NB, Ikuko K, Chen S, Tekmal RR, Vadlamudi RK. PELP1/MNAR deregulation promotes local estrogen synthesis in breast cancer cells. *Proc. Am. Assn. Cancer Res*, Los Angeles, CA, 04/2007

VI. Conference Attended

- 1) **Gordon Research Conference: Hormone Action in Development and Cancer – 2008.**
- 2) **American Association of Cancer Research (AACR) –San Diego meeting, 2008.**

VII. Technical Experience

1) **Bioinformatics Skills:**

Galaxy™ RNA Seq, NGS Analysis, SNP analysis, Galaxy Suite – Bioinformatics Analysis tool for GISTIC and Genome Analysis, **NGS QC analysis (Kinfra analysis, Mosaik analysis, Block-SSR Selective Sweep Region Identification, GULtope analysis and generation of Epitope Models).** Genomatix promoter/enhancer analysis tool, Sequence Analysis Software: BLAST suite, FASTA, CLUSTALW Genotyping, Variation and Pedigree Analysis, Python, Bioconductor. Statistical Packages: SPSS, SAS, GraphPad-PRISM.

Molecular genetics: Genomic DNA isolation; subcloning; generation and isotopic labeling of DNA probes from oligonucleotides, plasmids, yeast two hybrid screening; Southern blot; siRNA based techniques, site directed mutagenesis, gene targeting and bioinformatics (Promoter-Enhancer analysis using Genomatix™ software) SAR and protein modeling.

Mouse model: Immunohistochemistry, whole mount staining, mammary gland xenograft and tumorigenesis study, regeneration of mammary glands by mammary fat pad transplantation.

Biochemistry/Molecular Biology: Immunoprecipitation; Radioimmunoassay; ELISA; Chromatin Immunoprecipitation (ChIP), Molecular cloning, micro array analysis, qRT-PCR. Spectrophotometric enzyme assays; protein quantitation; polyacrylamide gel electrophoresis (Western Blot), kinase assays, protein expression (mammalian, bacterial), Epigraph and Epigenetics (Methylation – Acetylation, Alkylation, histone

methylation, Parsylation and Tankyrase modifications) Methylation (CpG methylation detection and analysis), site directed mutagenesis, southern blot, Northern blot, Site Directed Mutagenesis, In situ Hybridization.

Confocal Microscopy, Metamorph, **Atomic Force Microscopy**, Multiplex Assay Mutation Detection, RNA Immunoprecipitation, Mass Spectrometry (MS-MS Analysis), Single Molecule (RNA Localization) and Analysis (Proximity Ligation Assay), ncRNA Cloning, **TALEN technology**, ZFN (Zinc finger Nucleases Technology), **CRISP-R**.

Tissue Culture: Primary, immortal and tumor cell culture for carcinogenesis, morphogenesis, gene expression, shRNA based transfection, retroviral transduction and stable cell line generation.

VIII. Personnel Trained:

Cortez V – Research Technician, Vadlamudi Lab.

IX. Membership/Affiliations

- I) American Association for Cancer Research (AACR) – (AACR ID – 122735, Associate member) - 2005-2012:
- II) Indian Society for Studies on Animal Reproduction (ISSAR) 1999 - Present:

X. References

- 1) Dr. Ratna K. Vadlamudi Ph.D.
Professor
Dept of Ob & Gyn,
Division of Reproductive Research UTHSCSA,
7703 Floyd Curl Drive
San Antonio Texas – 78229
Phone: 210-542-2956, 210-567-4930
210-567-4958 (Fax)
Email: vadlamudi@uthscsa.edu
- 2) Dr. Rajeshwar Rao Tekmal, Ph.D.
Professor/Carl J Pauerstein Professorship
Dept of Ob & Gyn,
Division of Reproductive Research
UTHSCSA,
7703 Floyd Curl Drive, San Antonio
Texas – 78229
Phone: 210-857-6496
Fax: 210-567-4958, 210-567-4935 (Other)
Email: tekmal@uthscsa.edu

- 3) Prof Pallu Reddanna, PhD
(SVUniversity, Tirupati) Department of Animal
Sciences School of life Sciences University of
Hyderabad
Prof CRRao Road, Gachibowli
Hyderabad – 500046, India.
Phone: 09542661897
Email: preddanna@gmail.com.
- 4) Dr. G. Taru Sharma, Ph.D
Director,
National Institute of Animal Biotechnology
(NIAB), Opp. Journalist Colony, Near
Gowlidoddy, Extended Q City Road, Gachibowli,
Hyderabad, Telangana, India-500 032
Phone: +91-9412603840
Office: +91-4023120102
Email: gts553@gmail.com
tarusharma@niab.org.in
- 5) Dr. Dhara Dhaulakudi (Head & Nodal Officer)
Biotech and Mol Medicine
Department
Pt. B. D. Sharma, PGIMS,
Rohtak
Haryana-124001, India
Phone: +919416312237
Email: btmm.pgirohtak@gmail.com
- 6) Dr. G. Sai Kumar, Ph.D
Principal Scientist
Division of Veterinary
Pathology
Indian Veterinary Research Institute
Izatnagar, Bareilly -243122
Uttar Pradesh, India.
Email: gsk@ivri.up.nic.in